

US006467342B1

(12) United States Patent Gieseke

(10) Patent No.:

US 6,467,342 B1

(45) Date of Patent:

Oct. 22, 2002

(54) APPARATUS FOR MEASURING VELOCITY OF A PROJECTILE

(75) Inventor: Thomas J. Gieseke, Newport, RI (US)

(73) Assignce: The United States of America as

represented by the Secretary of the

Navy, Washington, DC (US)

(*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 66 days.

(21)	Appl. No	.: 09/652,836
(22)	Filed:	Aug. 30, 2000

(51)	Int. Cl. ⁷	G01L 5	5/14
	U.S. Cl 73/167; 7		

(58) Field of Search 73/162, 167; 324/178

(56) References Cited

U.S. PATENT DOCUMENTS

3,792,354	Α	*	2/1974	Slaght et al 324/178
5,531,113	Α	*	7/1996	Jamison 73/167
5,713,239	Α	*	2/1998	Kirschner 73/167
5,778,725	Α	*	7/1998	Kirschner et al 73/167

OTHER PUBLICATIONS

Disclosed prior art. Figs. 1-3.*

* cited by examiner

Primary Examiner—Hezron Williams Assistant Examiner—Andre' K. Jackson

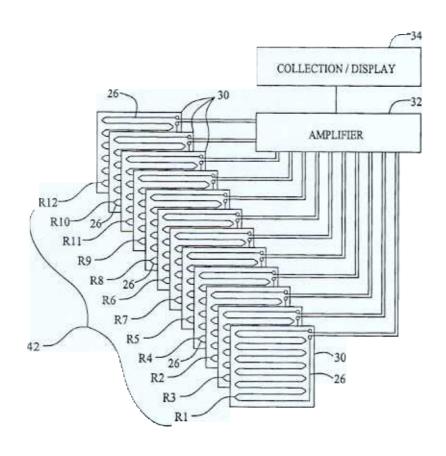
(74) Attorney, Agent, or Firm-Michael J. McGowan;

Michael F. Oglo; James M. Kasischke

(57) ABSTRACT

An apparatus for measuring velocity of a projectile includes a plurality of break-screens aligned with each other serially and along a line of travel of the projectile, and parallel to each other, and spaced from each other and from a projectile firing device by selected distances. Each break-screen includes a support sheet and an electrically conductive wire mounted on the sheet so as to be interrupted by passage of the projectile through the sheet. A single amplifier is in communication with each of the conductive wires and is adapted to provide an indication as to a change in voltage in each of the break-screens upon passage of the projectile therethrough, and an indication as to time of the passage. A data collection/display apparatus computes therefrom the velocity of the projectile.

8 Claims, 4 Drawing Sheets



324/178